

Executive Summary

Just as every season brings new life to the farm, every year brings new opportunities and tools to the fast-moving agriculture industry. Some things, however, don't change: year after year, agriculture remains one of North Carolina's largest industries and a way of life for many of its people. North Carolina's agricultural sector, including food, fiber and forestry, brings \$70.1 billion to the state every year. These revenues account for 18 percent of the state's income. Across North Carolina, 700,000 people—approximately 18 percent of the workforce—are part of the business of agriculture.

Although many states boast of a well-developed agriculture sector, North Carolina farms are distinct. Average farm size is much smaller in our state than in the nation as a whole—164 acres compared with 418 acres. Yet the net income per farm is higher in North Carolina—\$58,478 vs. \$41,810—than the U.S. average. It's clear that North Carolina farmers are savvy at business and crop management.

But new competition and challenges require new tools for even these savvy farmers to succeed in the marketplace. With its deeply rooted emphasis on research and education and its agriculture tradition, North Carolina is primed to leverage the tools of biotechnology to create that advantage.

Already, successes are evident from the mountains to the coast. In the last two years, the North Carolina Research Campus in Kannapolis and the Biofuels Center of North Carolina in Oxford opened. The most acres of crops enhanced by biotechnology were planted. Breakthroughs in research improved animal agriculture, nutrition, food safety, energy and the environment.

All contribute to a vibrant, growing sector that will transform North Carolina's agricultural heritage into its future.

Biotechnology brings exciting and lucrative opportunities that accompany the changing, challenging landscape of modern agriculture.

North Carolina's model for biotechnology development and its application to agriculture

Wanting North Carolina to be at the forefront of a new technology, the state in 1984 created the North Carolina Biotechnology Center to stimulate the biotechnology economy and create jobs.

The Biotechnology Center's mission is to provide long-term economic and societal benefits to North Carolina by supporting biotechnology research, business and education statewide. The Center accomplishes this mission via its five statewide offices in Asheville, Charlotte, Greenville, Winston-Salem and Wilmington and headquarters in Research Triangle Park.

The Biotechnology Center works with all aspects of biotechnology, and many of its resources have been devoted specifically to agricultural biotechnology. (See page 7)